Dr. Pollack is director of the Strategic Research Department in the Center for Naval Warfare Studies of the Naval War College, where he also directs the College's Asia-Pacific Studies Group. After earning his doctorate in political science from the University of Michigan and completing a postdoctoral fellowship at Harvard University, he worked for the RAND Corporation (successively as member of the research staff, head of the Political Science Department, faculty affiliate of the RAND Graduate School, director for international policy, and senior adviser for international policy). He has taught at the University of California at Los Angeles and at Brandeis University. His recent publications include The United States and Asia: Towards A New U.S. Strategy and Force Posture (2001, contributor), Preparing for Korean Unification: Scenarios and Implications (1999, senior author), The Future of Chinese and Japanese Naval Power: Implications for Northeast Asian Maritime Security (1998, senior author), In China's Shadow: Regional Perspectives on Chinese Foreign Policy and Military Development (1998, coeditor), Assembled in China: Sino-U.S. Collaboration and the Chinese Aviation Industry (1998, senior author), and The Future of U.S. Nuclear Weapons Policy (1997, contributor), as well as numerous journal articles and book chapters on U.S. Asia-Pacific strategy, Chinese political and strategic developments, and East Asian international relations.

maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding an DMB control number.	ion of information. Send comment arters Services, Directorate for Inf	s regarding this burden estimate formation Operations and Reports	or any other aspect of the property of the contract of the con	his collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE 2003	2. REPORT TYPE			3. DATES COVERED 00-00-2003 to 00-00-2003		
4. TITLE AND SUBTITLE				5a. CONTRACT NUMBER		
The United States, North Korea, and the End of the Agreed Framework				5b. GRANT NUMBER		
				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)				5d. PROJECT NUMBER		
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval War College,686 Cushing Road,Newport,RI,02841-1207				8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAIL Approved for publ	LABILITY STATEMENT ic release; distribut	ion unlimited				
13. SUPPLEMENTARY NO	OTES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFIC		17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON		
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	40		

Report Documentation Page

Form Approved OMB No. 0704-0188

THE UNITED STATES, NORTH KOREA, AND THE END OF THE AGREED FRAMEWORK

Jonathan D. Pollack

etween October and December 2002, with American policy makers preoccupied by the growing possibilities of war with Iraq, a more immediate and unanticipated confrontation loomed between the United States and North Korea. With stunning rapidity, Washington and Pyongyang unraveled close to a decade of painfully crafted diplomatic arrangements designed to prevent full-scale nuclear weapons development on the Korean Peninsula. By year's end, both countries had walked away from their respective commitments under the U.S.-DPRK Agreed Framework of October 1994, the major bilateral accord negotiated between Washington and Pyongyang during the 1990s. North Korea finalized its break with the earlier agreement by announcing its immediate withdrawal from the Nuclear Nonproliferation Treaty (NPT) on 10 January 2003, becoming the first nation ever to withdraw from the treaty, simultaneously severing all nuclear inspection arrangements with the International Atomic Energy Agency (IAEA).

The abrupt collapse of the Agreed Framework, in the absence of alternative arrangements to constrain North Korea's nuclear weapons potential, triggered major international concern over the longer-term consequences for the global nonproliferation regime. The renewed confrontation between the United States and North Korea also exacerbated the most serious tensions in the fifty-year history of the U.S.—Republic of Korea (ROK) alliance, quite possibly laying the groundwork for a major regional crisis unparalleled since the Korean War. Though a worst-case scenario is not inevitable, a peaceful outcome that prevents an avowed DPRK nuclear weapons capability seems far from assured, and an agreement acceptable to both states that would supplant the discarded 1994 agreement remains out of reach.

The Agreed Framework froze Pyongyang's activities at its Yongbyon nuclear complex, including the operation of a plutonium reprocessing facility. Left unconstrained, the reprocessing facility would have enabled North Korea to separate substantial quantities of weapons-grade plutonium from the spent fuel removed from its operational graphite-moderated reactor. Had its ongoing activities not been halted, North Korea would have ultimately developed the means to fabricate significant numbers of nuclear weapons, as well as enabled Pyongyang to market weapons-grade plutonium to other parties. In return

The Agreed Framework "as we know it is dead."

for mothballing its operational reactor and related facilities, the United States agreed to provide

heavy fuel oil to the North and to assume leadership of a multinational project to build two "proliferation resistant" light-water reactors (LWRs). These reactors were intended to replace the North's extant power reactor and forestall the completion of two larger reactors that would have enabled production of far greater quantities of weapons-grade plutonium.

As North Korea's nuclear activities increased during the late 1980s and early 1990s, the U.S. intelligence community devoted growing attention to Pyongyang's nuclear weapons potential. The reporting on the North's nuclear weapons program varied little during the 1990s, but estimates released since 2001 have been highly inconsistent. In 1993, the Central Intelligence Agency first concluded that in the late 1980s "North Korea . . . ha[d] produced enough plutonium for at least one, and possibly two, nuclear weapons." This judgment was reaffirmed in all unclassified intelligence assessments throughout the latter half of the 1990s, up to intelligence reporting in mid-2001. Though the CIA assessment was widely interpreted as evidence that North Korea had one or two nuclear weapons in its possession, neither the intelligence community nor any senior U.S. official offered a definitive statement to this effect during the remainder of the 1990s. However, the intelligence community assessment shifted noticeably in December 2001, when an unclassified version of a National Intelligence Estimate (NIE) asserted that "[t]he Intelligence Community judged in the mid-1990s that North Korea had produced one, possibly two, nuclear weapons."² Subsequent intelligence reporting further altered earlier estimates. In an unclassified assessment provided to the Congress on 19 November 2002, the CIA stated: "The U.S.... has assessed *since the early 1990s* that the North has one or possibly two [nuclear] weapons using plutonium it produced prior to 1992."³

The initial Bush administration intelligence estimates thus offered more definitive claims about North Korean nuclear capabilities. They also moved back the date that intelligence analysts believed North Korea had fabricated one or two weapons, or the supposed date when the CIA made this determination.

However, a CIA estimate provided to the Congress in January 2003 reverted to the more equivocal language of the 1990s, asserting that "North Korea probably has produced enough plutonium for at least one, and possibly two, nuclear weapons."4 The January 2003 document did not reiterate the assertions of late 2001 and late 2002 that Pyongyang already possessed one or two weapons, let alone claim that the intelligence community arrived at this judgment at a much earlier date. Intelligence inconsistencies and uncertainties concerning the North's nuclear program were not surprising. However, decade-old estimates were now being sharply recast, with direct implications for future U.S. policy toward Pyongyang.

In addition, the U.S. intelligence community concluded in the summer of 2002 that North Korea had undertaken a covert uranium-enrichment program, most likely initiated in the late 1990s. According to the CIA, activities associated with this program surfaced definitively during 2001, including extensive purchases of materials for construction of a gas-centrifuge enrichment facility.⁵ Though the CIA contended in November 2002 that the facility was at least three years from becoming operational, intelligence analysts believed that a completed facility could ultimately produce sufficient fissile material for "two or more nuclear weapons per year."6 In the CIA's judgment, an enrichment facility would provide the North an alternative source of fissile material to substitute for the plutonium reprocessing activities frozen under the Agreed Framework. In addition, the November 2002 intelligence estimate did not preclude the possibility of Pyongyang's reactivating its plutonium separation program.

U.S. officials asserted that North Korea's enrichment activities violated the spirit and the letter of the 1994 accords, through which both states pledged to keep the Korean Peninsula free of nuclear weapons and to redefine political and economic relations between the two countries. As stated by President Bush in his 6 March 2003 press conference, "My predecessor, in a good-faith effort, entered into a framework agreement [with North Korea]. The United States honored its side of the agreement. North Korea didn't. While we felt the agreement was in force, North Korea was enriching uranium." Under the Agreed Framework, Pyongyang had pledged to "consistently take steps" to implement the January 1992 Joint Declaration on the Denuclearization of the Korean Peninsula, which obligated the South and North not to "test, manufacture, produce, receive, possess, store, deploy or use nuclear weapons," as well as committing both countries "not [to] possess nuclear reprocessing and uranium enrichment facilities." During 2001, senior administration officials had acknowledged that North Korea had upheld its obligations under the Agreed Framework.⁸ But the United States now confronted the possibility of a covert fissile material program not covered by the 1994 agreement, thereby enabling Pyongyang to circumvent its declared nonproliferation commitments.

After reviewing the intelligence data and weighing American policy options, the Bush administration in early October 2002 dispatched a presidential emissary, Assistant Secretary of State for East Asian and Pacific Affairs James Kelly, to Pyongyang. Assistant Secretary Kelly informed senior North Korean officials of the summer 2002 intelligence findings, without furnishing specific or detailed evidence to substantiate them. He made clear that these developments had introduced a "precondition" to any possible improvement in U.S.-North Korean relations, and that North Korea would need to verifiably dismantle its covert nuclear activities before the United States would consider the resumption of high-level exchanges with the DPRK. According to State Department officials, North Korean officials first denied the U.S. allegations. However, in a final meeting with Assistant Secretary of State Kelly, a senior North Korean official, First Vice Minister of Foreign Affairs Kang Sok Ju, reportedly admitted the existence of a clandestine nuclear weapons program, while asserting a sovereign right to develop nuclear weapons and "more powerful things as well." Kang also allegedly informed his American interlocutors of the North's intention to terminate the Agreed Framework.¹⁰

A fuller rendering of policy developments prior to the Kelly visit and subsequent events suggests a more complex and more troubling story. North Korean scientists had engaged in activities that contravened or skirted declared obligations under the Agreed Framework, but neither Washington nor Pyongyang dis-

The Bush administration had opted for a waiting game with Pyongyang.

tinguished itself in reacting to the intelligence claims. Leaders in both capitals were increasingly dissatisfied with the 1994 accord,

though for very different reasons. Pyongyang complained repeatedly that the United States was lagging far behind the scheduled completion of the LWR project, and Washington faulted the North for delays in clarifying its prior nuclear weapons activities. Neither government saw compelling reasons to sustain the 1994 accord. The intelligence findings thus enabled both governments to deem their prior obligations null and void. With both countries putting forward maximal, nonnegotiable policy positions, the subsequent collapse of the Agreed Framework was virtually foreordained, though it unfolded with far greater rapidity than U.S. officials probably anticipated.

This article will focus primarily on the factors that led to the breakdown of the Agreed Framework. This requires analysis at four principal levels: U.S.—North Korean relations under the Clinton administration; early Bush administration policies and how these policies may have affected North Korean political

and security calculations; an assessment of the nuclear enrichment activities undertaken by North Korea; and how Washington and Pyongyang responded to the U.S. disclosure of North Korea's renewed nuclear activities, leading to the policy impasse and ultimate collapse of the Agreed Framework in late 2002 and early 2003. These larger issues first necessitate some observations on the North Korean system, its current circumstances and political-military orientation, and the North's negotiating strategies.

UNDERSTANDING THE NORTH KOREAN SYSTEM

The Democratic People's Republic of Korea (DPRK) is the world's most self-referential political system and America's longest-running political-military adversary. The United States has continuously deployed major military forces on the peninsula for a half-century to prevent a second Korean war and help defend South Korea in the event of deterrence failure. The North continues to adhere to a national mythology reinforced by a dynastic succession from father (Kim Il Sung) to son (Kim Jong Il). It is the world's sole surviving Stalinist state, with an undiminished cult of personality surrounding Kim Jong Il. Indeed, nearly a decade after Kim Il Sung's death, the position of president remains unfilled, enabling the elder Kim to be designated president in perpetuity.

North Korea is also the world's most militarized regime. Its massive conventional forces, rocket launchers, and artillery deployed immediately north of the thirty-eighth parallel pose an inherent risk to thirty-seven thousand U.S. military personnel stationed in the ROK, as well as to the well-being and security of South Korea as a whole. The North maintains large stockpiles of chemical and biological agents; the primary research and production facilities are contiguous to the Chinese border, thereby rendering them far more problematic to target during wartime. Hundreds of Scud B and C missiles (some estimates range as high as six hundred) are deployed at various locations in the DPRK, from which they are able to strike targets throughout the peninsula; hundreds of these missiles have also been exported to the Middle East, the Persian Gulf, and South Asia. Lesser numbers of Nodong 1 and 2 missiles (generally estimated at about thirty, though other estimates range lower as well as higher) are reportedly deployed at missile bases in the North; they have a range up to 1,300 kilometers and are therefore able to reach targets throughout Japan. ¹² Given the North's capabilities and the South's geography and highly concentrated population centers, any significant armed conflict would be extremely violent and destructive; this possibility has long sobered senior U.S. and ROK officials.

North Korea is also a society experiencing acute internal privation. Despite some limited evidence of experimentation with market-based reforms, its economy remains almost totally detached from the dynamism of the ROK and China. The North's dysfunctional economic policies led to a horrific famine and humanitarian crisis during the mid-1990s, likely resulting in the deaths of as many as 2.5 million people, or more than 10 percent of the country's total population. Having lost its Cold War subsidies provided by the former Soviet Union, and to a lesser extent by China, North Korea is sustained principally by international aid programs (especially for food and energy); tourism and joint venture activity provided by the South; and revenue from sales of ballistic missiles and from illicit economic activities. Its ultimate goal appears to be regime survival, even as it continues to present itself as the sole legitimate embodiment of Korean nationalism.

Despite (or because of) its grim isolation and horrendous internal circumstances, North Korea has proven extraordinarily resourceful in eliciting international assistance and in holding its own in negotiations with the outside world. 14 It consistently punches above its weight and derives much of its political legitimacy from the international attention it has garnered from various major powers, which it then conveys to its own populace and within the North Korean elite. It has parlayed its vulnerabilities, nuclear weapons and ballistic missile programs, and the ever-present threat of a second Korean war into a finely honed negotiating strategy. In so doing, it has withstood international pressure and prevented the outside world from imposing political and diplomatic outcomes on the North that Pyongyang deems unacceptable. 15 Through insistence on norms that foreign interlocutors seldom grasp but to which they are frequently compelled to accommodate, North Korea has remained within its protective political cocoon, repeatedly frustrating international efforts to induce major change in its internal and external behavior. These considerations shaped what the Clinton administration deemed possible in its diplomacy with the North, as well as the subsequent policies of the Bush administration.

THE CLINTON ADMINISTRATION AND THE AGREED FRAMEWORK

From its initial promulgation in October 1994 until its ultimate demise, the Agreed Framework was widely judged an incomplete and flawed policy document but one that did achieve measurable results. ¹⁶ It reflected the inherent peculiarities in U.S.-DPRK relations, including Pyongyang's expectation that the United States serve as its near-exclusive nuclear interlocutor and tacit guarantor of the North's sovereignty and security. The events of late 2002 and early 2003 suggest clear parallels with the U.S.-North Korean negotiations of the early 1990s, though the outcome of the latter confrontation has thus far been decidedly different. ¹⁷ The predominant concern of the Clinton administration was to forestall North Korean plutonium generation and reprocessing activities unconstrained by international inspections and in defiance of international norms.

These worries shaped the administration's primary objectives in its bilateral negotiations and identified the relevant pressure points that North Korea sought to exploit. The missing pieces in the Agreed Framework (in particular, North Korea's undeclared nuclear facilities and the prior history of the DPRK's reprocessing activities) and the inability or unwillingness of both governments to fulfill their respective commitments under the agreement ultimately proved the source of its undoing. However, the Bush administration has yet to propose an alternative strategy to rebuild what the Agreed Framework successfully achieved.

The history of ensuring North Korean compliance with its nonproliferation commitments is a long and checkered one, antedating high-level U.S. negotiations with the North by well over a half-decade. Virtually all agreements have involved protracted negotiations, with many understandings repeatedly subject to reversal or threatened breakdown. Depending on how North Korean intentions are viewed, this record illustrates Pyongyang's intense fears and outright paranoia toward the outside world, or it highlights North Korea's exceptional

President Bush's remarks were a rebuke to Kim Dae-jung, [who] reportedly took ample offense.

skill at evading full disclosure and wringing concessions from very powerful adversaries. (A satisfactory answer entails elements of

both factors.) Responding to sustained pressure from Soviet officials who were otherwise unprepared to furnish larger nuclear-power reactors to the North, the DPRK signed the NPT in late 1985. However, it was not until the spring of 1992, nearly five years longer than stipulated by IAEA requirements and following the unilateral withdrawal of all U.S. tactical nuclear weapons from the peninsula in September 1991, that North Korea ratified a safeguards agreement, including the declaration of seven principal nuclear sites. Following a series of inspections during the latter half of 1992, the IAEA uncovered significant discrepancies in the data provided by North Korea, leading the agency in February 1993 to demand special inspections at two plutonium storage facilities at the Yongbyon nuclear complex, approximately seventy-five kilometers north of Pyongyang. The following month, North Korea declared its intention to withdraw from the NPT, a decision that was suspended once negotiations with the United States began in June 1993.¹⁹

Although North Korea did grant IAEA inspectors access to some of its declared nuclear sites, it continued to deny requests to visit the plutonium reprocessing facility. North Korean technicians also began to remove spent fuel rods from the five-megawatt research reactor at Yongbyon without inspectors being present.²⁰ Fearful of the consequences for proliferation should Pyongyang ultimately reprocess the thousands of spent fuel rods stored at Yongbyon, the

Clinton administration in the spring of 1994 reportedly undertook detailed planning for an air attack on the North's principal nuclear complex. An attack would have been designed to entomb the plutonium in the reactor and to destroy the reprocessing facility, even though (as senior U.S. officials assumed) the attack would trigger full-scale war on the peninsula. Opinions remain divided on whether the Clinton administration was fully prepared to undertake these military operations, in view of the risks, uncertainties, and potential consequences of a major attack. But President Carter's June 1994 visit to Pyongyang abruptly altered these circumstances. In discussions with the former American president, Kim Il Sung offered to freeze the North's nuclear activities in exchange for renewed talks with the United States and a negotiated understanding with Washington, forestalling the immediate possibility of a major regional crisis. 22

The Agreed Framework, signed on 21 October 1994, entailed an overlapping set of joint and national-level obligations, many of which remained unfulfilled at the time of the unraveling of the accords in late 2002. The United States and DPRK pledged to normalize economic and political relations, including the ultimate exchange of ambassadors. North Korea was expected to fulfill its commitments under the South-North denuclearization agreement of 1992; for its part, the United States was obligated to "provide formal assurances" not to threaten or use nuclear weapons against the DPRK. The United States agreed to establish and lead the Korean Peninsula Energy Development Organization (KEDO), a multinational consortium that would oversee the financing and construction of a pair of thousand-megawatt light-water reactors to replace the North's existing or planned graphite-moderated reactors. Building directly on the Agreed Framework, KEDO and the DPRK signed a contract for two LWRs in December 1995.

The principal U.S. concern was focused on a fifty-megawatt reactor then under construction at Yongbyon and a two-hundred-megawatt reactor then under construction at Taechon. Had these projects become fully operational, they were expected to yield approximately 275 kilograms of weapons-grade plutonium each year. Depending on the assumed requirements for fabricating a plutonium weapon, this amount of fissile material would have provided North Korea the annual potential to produce more than forty nuclear weapons. The original target date for completion of the LWR project was 2003. Pending its completion, the United States was obligated each year to provide North Korea with five hundred thousand metric tons of heavy fuel oil to compensate for the energy production the North claimed it would forgo by shutting down its indigenous five-megawatt reactor and ceasing construction of the larger reactors.

From the U.S. perspective, the essence of the Agreed Framework concerned the constraints imposed on North Korea's nuclear activities, in return for U.S. leadership of the LWR project and the provision of heavy fuel oil. In a separate "letter of assurance" provided to Kim Jong Il the day prior to the signing of the Agreed Framework, President Clinton pledged to

use the full powers of my office to facilitate . . . the light-water nuclear power project . . . and the funding and implementation of interim energy alternatives . . . pending completion of the first reactor unit. . . . [I]n the event that this reactor project [or the interim energy alternatives are] not completed for reasons beyond the control of the DPRK, I will use the full powers of my office to provide, to the extent necessary, such a project [and interim energy alternatives] from the U.S., subject to the approval of the U.S. Congress. . . . I will follow this course of action so long as the DPRK continues to uphold the policies described in the Agreed Framework. 27

In return for these commitments, Pyongyang was obligated to freeze operation of its existing graphite-moderated reactor and of the reprocessing facility, and to cease construction of the larger reactors. The DPRK was also required to remain a party to the NPT.

However, specific milestones under the Agreed Framework were repeatedly subject to divergent interpretation by the two sides; in particular, there were repeated complaints by Pyongyang about slippage in various delivery schedules.²⁸ First, the reactor construction projects at Yongbyon and Taechon were to be dismantled prior to completion of the second LWR, but no date was specified for when the dismantlement would begin. Second, the DPRK was obligated to be in "full compliance" with IAEA safeguards when a "significant portion of [the LWR project is completed, but before the delivery of key nuclear components." Compliance was expected to include a full rendering of North Korea's reprocessing activities during the late 1980s, when (as noted previously) the intelligence community believed that the North may have separated sufficient plutonium to fabricate one or two nuclear weapons. Third, North Korea was required to disclose the location and allow inspection of all undeclared nuclear sites, but not until a "significant portion" of the first LWR had been completed. Fourth, North Korea was obligated to can the eight thousand spent fuel rods and place them in a cooling pond, with all spent fuel to be removed from the DPRK once the nuclear components for the first LWR began to arrive in the DPRK and after the North was judged in full compliance with IAEA safeguards.

For better or for worse, the Agreed Framework and the KEDO accords defined the overall context of U.S.–North Korean relations for the remainder of the Clinton administration. The agreement immediately provoked major criticisms from the Republican opposition, as well as from then ROK president Kim Young-sam, who argued that the agreement had been consummated without sufficient regard for the ROK's sovereign interests. ²⁹ The combination of domestic objections in the United States (greatly strengthened when the Republicans

captured control of the Congress in the 1994 midterm elections) and a disgruntled South Korean ally severely impeded fulfillment of the Agreed Framework's milestones. KEDO (though led by the United States) relied almost entirely on financial support from the ROK, Japan, and piecemeal contributions from other governments solicited on an annual basis; long-term funding seemed virtually out of the question. With the project proceeding much more slowly than stipulated under the accord, there were growing North Korean complaints of energy and economic losses it was supposedly sustaining as a consequence of the Agreed Framework, as well as parallel demands that the United States compensate Pyongyang for these losses.³⁰

North Korea also proved very selective in pursuing ancillary portions of the accord. Although Pyongyang expeditiously froze the nuclear activities specified in the agreement, it was not ready to accelerate fuller political relations with the United States. The Clinton administration was far more intent than its North Korean counterparts on establishing liaison offices in both capitals. The DPRK preferred to work with U.S. officials through its UN mission or in negotiations in various foreign capitals, and it repeatedly blocked proposals that would have enabled a regular U.S. diplomatic presence in Pyongyang. North Korean officials

The Bush administration has yet to propose an alternative strategy to rebuild what the Agreed Framework successfully achieved.

may well have believed that the delay in the opening of liaison offices might induce the United States to implement the Agreed Framework more rapidly, but this

proved a miscalculation. However, North Korea was now on the American radar screen, and leaders in Pyongyang clearly understood how to prompt attention to the North's expressed needs. The administration's foreign policy critics saw this factor as one of the major weaknesses of Clinton administration strategy toward the North—in the judgment of the critics, Pyongyang led and Washington followed.

North Korea also understood that the Clinton administration was increasingly concerned about possible breakthroughs in North Korean ballistic missile development, both through its own deployments and by accelerated exports. In May 1993, the DPRK successfully flight-tested its Nodong 1 missile in the Sea of Japan. Though the missile test generated little reaction at the time (perhaps given the North's then-extant threat to withdraw from the NPT), it ultimately resulted in missile negotiations that paralleled the nuclear agreements. These talks were first held in April 1996; six additional rounds were undertaken over the next four years.

From the outset of the missile negotiations, Pyongyang demanded financial compensation from the United States in exchange for the DPRK's forgoing

additional sales. The Clinton administration repeatedly turned aside these entreaties. But North Korean statements suggested that Pyongyang might be willing to accept political and security compensation as well as heightened economic assistance as an alternative to cash payments. This possibility—in essence, an Agreed Framework for missiles—preoccupied senior U.S. officials for the remainder of President Clinton's tenure in office. This included a May 1999 visit to Pyongyang by former secretary of defense William J. Perry (by then a designated presidential envoy and policy coordinator for North Korea); a visit by a senior North Korean military official (Vice Marshal Jo Myung Rok) to the White House in October 2000; and the visit of Secretary of State Madeleine Albright to Pyongyang later the same month. It was only in late December 2000 that President Clinton ruled out a visit to the North Korean capital, thereby dashing any expectations of a last-minute "missile deal."

At the same time as the bilateral negotiations proceeded, three major factors had altered the larger context of U.S.-North Korean relations: the North's accelerated internal decline coincident with Kim Jong Il's steady consolidation of power, with Pyongyang depending ever more on an "aid based" survival strategy; continued evidence of North Korean missile development and lingering suspicions of covert nuclear weapons activity; and the election of a new Korean president (Kim Dae-jung) who advocated a much more accommodative stance toward the North than his predecessor. Foreign interlocutors were seeking to unlock Pyongyang's doors at every turn, providing the North with unparalleled leverage in its dealings with the outside world. North Korea sought to push its advantage. This included the August 1998 launch of a three-stage Taepodong 1 missile that flew over northern Honshu; mounting U.S. concerns about a suspect underground nuclear facility at Kumch'ang-ri (where U.S. intelligence feared North Korea might be building a covert plutonium production facility); and the ROK's ever-increasing cultivation of the DPRK, leading to the June 2000 visit of Kim Dae-jung to Pyongyang for the first-ever South-North summit.

Though North Korea's calculations toward relations with the United States and other powers operated at multiple levels, expectations of financial compensation were near the top of its list. ³¹ In a December 1998 meeting with U.S. officials intended to address the underground facility at Kumch'ang-ri, North Korean negotiators insisted that the United States would have to provide appropriate payment for an anticipated site visit. American negotiators continued to reject blatant North Korean appeals for direct compensation. When a U.S. inspection team visited the site five months later, it found no evidence of nuclear activity, but the United States did provide major increases in food aid following the visit. A second site visit the next May followed a comparable pattern. But U.S. officials sought to define any prospective bilateral agreement in political and security terms. During his visit to Pyongyang in May 1999, William Perry broached a range of proposals designed to address North Korean nuclear activities outside the scope of the Agreed Framework and to forestall further ballistic missile development by the North. The following September, Pyongyang pledged a moratorium on further long-range missile tests as long as U.S.-North Korean missile negotiations continued. For its part, the United States announced a partial lifting of economic sanctions long imposed on the North.

In mid-October 1999, former secretary Perry submitted his long-awaited report to President Clinton, which argued for a

comprehensive and integrated approach . . . [designed to ensure] that the DPRK does not have a nuclear weapons program. We would also seek the complete and verifiable cessation of testing, production, and deployment of missiles exceeding the parameters of the Missile Technology Control Regime, and the complete cessation of export sales of such missiles and the equipment and technology associated with them. [In return, . . .] the United States and its allies would, in a step by step and reciprocal fashion, move to reduce pressures on the DPRK that it perceives as threatening. . . . If the DPRK moved to eliminate its nuclear and long-range missile threats, the United States would normalize relations with the DPRK, relax sanctions that have long constrained trade with the DPRK, and take other positive steps that would provide opportunities for the DPRK.

Should North Korea be unprepared to accept the U.S. proposal, the report concluded, "it will not be possible for the United States to pursue a new relationship with the DPRK. In that case, the United States and its allies would have to take other steps to ensure their security and contain the threat."32

The Perry report marked the beginning of a sustained effort at the highest levels of the Clinton administration to achieve a larger breakthrough in relations with North Korea. The circumstances were never more propitious for such a breakthrough, including the unequivocal endorsement of a U.S.-North Korea bilateral accord by ROK president Kim Dae-jung. Even as Pyongyang intermittently signaled interest in at least some of the policy objectives outlined in the Perry report, its negotiating tactics were inconsistent and frequently unresponsive to expressed U.S. concerns. In June 2000, the United States announced additional relaxations of long-standing trade sanctions against the North, with the DPRK reaffirming its moratorium on additional missile tests. But in a fifth round of missile talks weeks later in Kuala Lumpur, Pyongyang renewed its earlier demands for a billion dollars in annual compensation in return for halts in missile exports. The United States continued to spurn such demands, while conveying its willingness to expedite "economic normalization" with the DPRK in return for the North addressing U.S. security concerns.

Weeks later, in his first meeting with Russian president Vladimir Putin, Kim Jong Il again sought to advance a possible agreement with Washington. Kim promised the Russian leader that Pyongyang would cease its missile tests in exchange for countries (i.e., the United States) opposed to North Korean missile development facilitating North Korean satellite launches, presumably on U.S. rockets. A month later, however, Kim told a group of visiting South Korean publishers and journalists that his proposal had been made "in humor," thereby calling into question the seriousness of his previous offer. But senior U.S. officials continued to pursue these possibilities, culminating in the October visits of Vice Marshal Jo to Washington and Secretary of State Albright to Pyongyang, where she met at length with Kim Jong Il, the first American official to do so.

At the conclusion of Vice Marshal Jo's visit, both governments pledged that they would "fundamentally improve their bilateral relations." Toward this end, "the two sides stated that neither government would have hostile intent toward the other and continued the commitment of both governments . . . to build a new relationship free from past enmity. . . . The two sides [also] agreed that resolution of the missile issue would make an essential contribution to a fundamentally improved relationship between them and to peace and security in the Asia-Pacific region."33

Several former Clinton administration officials (notably Secretary Albright and Perry's successor as Special Coordinator for North Korean Affairs, Ambassador Wendy Sherman) believed that a missile agreement was within reach in the waning weeks of the Clinton presidency but that a presidential visit to Pyongyang would be required to achieve it. 34 Vice Marshal Jo delivered a letter from Kim Jong Il inviting President Clinton to Pyongyang; First Vice Minister of Foreign Affairs Kang Sok Ju (also a delegation member) reportedly outlined the prospective content of an agreement, including restraints on future missile development and export. During Albright's visit to Pyongyang, Kim Jong Il informed her that North Korea would refrain from further tests of the Taepodong 1 missile. According to Selig Harrison, Kim Jong Il also informed Albright that "North Korea would be prepared to negotiate an immediate freeze on long-range missile testing and development and to stop all exports of missiles and missile components, provided that the United States offered sufficient economic aid and other inducements in return, including arrangements to launch North Korean scientific research and communications satellites."35 Kim Jong Il clearly hoped that the allure of a major breakthrough in U.S.-North Korean relations would convince Bill Clinton to undertake a visit to Pyongyang in the waning weeks of his presidency. However, the prospective agreement seemed far too contingent and uncertain to warrant a high-risk trip, and on 28 December the president demurred.

During 1999 and 2000 the Clinton administration had also begun to receive scattered reports that North Korea was exploring a covert nuclear enrichment option in evident violation of its commitments under the Agreed Framework. But the evidence was far from definitive. Pyongyang was also voicing mounting impatience with what it deemed laggard progress on the reactor project. As the 2003 target date for installation of the first reactor approached, North Korean statements assumed a sharper edge. On 22 February 2001, a DPRK Foreign Ministry spokesman stated: "If [the United States] does not honestly implement the Agreed Framework[,]... there is no need for us to be bound to it any longer. We cannot but consider the existence of KEDO as meaningless under the present situation when no one can tell when the LWR project will be completed." On 18 June 2001, the same source warned that "the Agreed Framework is in danger of collapse due to the delay of the LWR provision."³⁶ The DPRK was trying to build a case for compensation for the project delays, even as these delays deferred Pyongyang's obligations to fully disclose its past nuclear history and identify all its nuclear sites. But Pyongyang was also warning that it might decide to walk away from its obligations under the Agreed Framework if there were further delays in completion of the first phase of the reactor project. As the Bush administration took power, U.S.-North Korean relations remained uncertain, incomplete, and far from satisfactory for either country.

THE BUSH ADMINISTRATION AND NORTH KOREA

The Bush administration assumed office convinced that President Clinton and his top advisers had been far too solicitous of North Korea and that Pyongyang had not undertaken the requisite steps for verifiable threat reduction, which the new administration believed essential to genuine accommodation. The new leadership team also needed to review the negotiating record of the preceding eight years. At the same time, the Bush administration's determination to accelerate pursuit of national missile defense to protect the United States against potential "rogue state" missile threats had North Korea more in mind than any other state, given that its missile program was far more advanced than that of Iran or Iraq. The new administration also expressed its determination to rebuild America's major Asian alliances, which it believed had been undermined during President Clinton's tenure in office. However, this pledge was far more relevant to Japan than to the ROK. President Bush's senior Asian advisers were fully aware that President Clinton had achieved a close working relationship with South Korean president Kim Dae-jung, who in the aftermath of his June 2000 visit to Pyongyang had been increasingly committed to pursuit of the "Sunshine Policy" toward the DPRK. Kim saw the outcome of the Perry review process and the Clinton administration's pursuit of a larger political breakthrough with the

North as vindicating his efforts to dismantle a decades-long threat-driven policy on the peninsula. But he also understood the risks to his larger policy initiatives if he and the Bush administration were working at cross-purposes.

Less than three weeks after the Bush administration assumed office, Kim Dae-jung dispatched Minister of Foreign Affairs and Trade Lee Joung-binn to Washington. Lee briefed Secretary of State Powell on ROK policy toward the North, sought a renewed U.S. endorsement of the Sunshine Policy, and lobbied for "a meeting between President Bush and President Kim at the earliest possible time."37 Although Secretary Powell offered a broad endorsement of ROK policy,

[North Korea's] ultimate goal appears to be regime survival.

he also made reference to specific U.S. policy concerns with the North that were under review by the new administration. A month

later, Kim Dae-jung traveled to Washington for a working meeting with President Bush. On 6 March (the day prior to the scheduled meeting between the two leaders), Secretary of State Powell declared that the Bush administration "plan[s] to engage with North Korea to pick up where President Clinton left off. Some promising elements were left on the table and we will be examining those elements."

President Bush offered no comparable assurance to Kim Dae-jung. The president declared that he "look[s] forward to, at some point in the future, having a dialogue with the North Koreans, but that any negotiation would require complete verification of the terms of a potential agreement." (The stated U.S. preference for "dialogue" rather than "negotiation" would recur during the renewed nuclear crisis.) The president voiced open skepticism about the trustworthiness of Kim Jong Il and whether the North was "keeping all terms of all agreements." The president's public remarks prefigured a deeply held animus toward Kim Jong II that he conveyed with evident emotion in an August 2002 interview with Bob Woodward.³⁸ In addition, he emphasized that the administration was still in the midst of a larger review of its policy options toward Pyongyang. Secretary Powell distanced himself from his comments of the previous day, making clear that early resumption of negotiations with the North was not in the offing. President Bush's remarks were a sharp and humiliating rebuke to Kim Dae-jung, and the ROK president reportedly took ample offense. North Korea wasted little time in reacting to the president's statement, canceling ministerial-level talks scheduled for Seoul the following week and harshly criticizing what it characterized as "hostile" U.S. policy. Pyongyang reiterated that it was "fully prepared for both dialogue and war."

Following extensive internal deliberations over U.S. policy options, on 6 June President Bush announced completion of the administration's North Korea policy review, reportedly following a private intervention by former president George H. W. Bush at the behest of his former national security aide Donald Gregg, president of the Korea Society and a leading advocate of the Sunshine Policy. The administration called for a "comprehensive approach," encompassing "a broad agenda that includes missile, nuclear, and conventional force issues and humanitarian concerns. . . . [I]f the DPRK takes serious steps to improve relations with the United States, we are prepared to expand our efforts to help the North Korean people, ease sanctions, and take other political steps." The administration's approach assumed "improved implementation of the Agreed Framework," "verifiable constraints" on North Korean missile development, and "a less threatening conventional military posture."

During a late July visit to Seoul, Secretary of State Powell indicated that the United States had "no preconditions" to a resumption of talks with Pyongyang, but a much more arms-length quality increasingly defined U.S. policy. Though the administration was prepared to continue support for the Agreed Framework and provision of food aid, it would not resume where its predecessor had left off.⁴¹ In the absence of substantial changes in North Korean policy, the United States would not undertake major new initiatives with the North, let alone be drawn into open-ended negotiations akin to those of the Clinton administration, which many senior officials judged demeaning and simply not worth the effort. Improved relations with the North would not be a high priority for the new administration; the DPRK had first to address major U.S. policy concerns before the United States would pursue improved relations. Pending future developments, U.S. policy toward North Korea was on hold.

North Korean officials took undoubted offense at the sharp turn away from Clinton administration policy and at the president's clear distaste for Kim Jong Il. Kim nonetheless sought to keep the door ajar to the United States, informing a visiting European Union delegation in May 2001 that North Korea would maintain its promised moratorium on missile testing until 2003. He reiterated this pledge in a second meeting with Russian president Putin in August. U.S. officials took note of these pledges but judged them an insufficient basis for high-level exchanges. A far more circumscribed policy toward Pyongyang reflected the administration's emergent attention to the growing risks of nuclear and missile proliferation, in which North Korea figured prominently. The new policy also reflected the importance that the administration attached to defending against future ballistic missile threats, beginning with a hypothesized North Korean intercontinental-ballistic-missile threat to the United States. The Bush administration, seeing no particular need or incentive to invest major time and effort in conciliating the North, had opted for a waiting game with Pyongyang.

The terrorist attacks of 11 September further reaffirmed the diminished U.S. policy priority attached to engaging North Korea and strengthened the administration's predisposition to view Pyongyang as a looming danger, not a negotiating partner. Although the DPRK signed several antiterrorist international protocols in the aftermath of the terrorist attacks, the administration's larger view of North Korea had turned even harsher. A succession of policy pronouncements by the administration, beginning with the president's 29 January 2002 State of the Union address characterizing North Korea as part of the "axis of evil," diminished further the prospects for renewed high-level exchanges with the North. Other disclosures and policy statements, including the prospective use of nuclear weapons in a major Korean contingency outlined in the 2001 Nuclear Posture Review and reported in mid-March 2002; the president's June 2002 speech at the U.S. Military Academy; and the September 2002 release of The National Security Strategy of the United States of America—all elevated North Korea to one of America's defining national security threats. 42

The characterization of North Korea and Iraq as the primary "rogue state" threats was designed to warn Baghdad and Pyongyang, not propitiate them. According to the policy document, "rogue states" pursued repression of their citizens, threatened neighboring states, violated international treaties, sought weapons of mass destruction (WMD) to intimidate others, served as sponsors of terrorism, and rejected American values. The administration's additional requirement for "new methods of deterrence" against any potential use of WMD meant that it did not feel bound by previous policy commitments, including the Agreed Framework pledge that the United States would "provide formal assurances" that it would neither threaten nor use nuclear weapons against the DPRK. In the words of a December 2002 addendum to the national security strategy, "The United States . . . reserves the right to respond with overwhelming force including resort to all our options—to the use of WMD against the United States, our forces abroad, and our allies."43

The only exception to this bill of particulars for Pyongyang was the absence of any U.S. allegations of active North Korean links to terrorist groups. Subsequent events (to be explored below) would further differentiate U.S. policies toward Iraq and North Korea, but the immediate message and political effects were beyond dispute. "Rogue states" had been deemed a defining security concern in the administration's national security strategy. This placed primary attention on deterring and defending against WMD use and, if necessary, undertaking preemptive actions to forestall imminent threats to the security of the United States. Unlike the Clinton administration, which had viewed Pyongyang as an interlocutor with whom threat reduction could be negotiated, the Bush administration (especially in a post-11 September context) saw North Korea as an emergent

and potentially much larger danger. Despite these characterizations, Secretary of State Powell acknowledged Pyongyang's continued adherence to its promised missile test moratorium, as well as to the North's upholding of its commitments under the Agreed Framework.⁴⁴ But the secretary's insistence that the United States was ready to resume a dialogue with Pyongyang "without any preconditions" had already assumed a somewhat ritualized quality; there was little, if any, prospect of serious negotiations.

DPRK officials had long and assiduously followed U.S. security policy debate, with North Korean media paying exacting attention to various U.S. policy documents. Having been cultivated and validated under the Clinton administration's engagement policies, the North's leadership was especially attentive to perceived slights to its international status, in particular any diminished U.S. willingness to deem the DPRK a credible or legitimate interlocutor. Once the renewed nuclear crisis unfolded fully in October, North Korean statements regularly cited President Bush's inclusion of the North in the "axis of evil" and the administration's preemption doctrine as virtual declarations of war that justified the DPRK's withdrawal from the NPT. Given that North Korean media frequently resorted to hyperbolic language to characterize U.S. intentions, it is possible and even likely that U.S. officials paid little heed to the North's statements. North Korea may have drawn worst-case conclusions from changes in U.S. declaratory policy, but the DPRK probably felt slighted as much as threatened.

However, North Korea did not close all doors to discussions with Washington. On 31 July 2002, Secretary of State Powell met briefly in Brunei with the DPRK minister of foreign affairs, Paik Nam Sun. On 7 August, Charles Pritchard, the U.S. special envoy to North Korea and U.S. representative to KEDO, traveled to Kumho, the site of the light-water reactor project, where concrete was being poured for the first of the LWRs. Pritchard was the highest U.S. official visitor to the DPRK since Secretary of State Albright in October 2000. Though the KEDO process seemed to be making halting progress, the DPRK Foreign Ministry spokesman warned on 13 August that "the Agreed Framework stands at the cross-roads of abrogation or preservation due to the substantial delay in the provision of the LWRs." But other developments soon swamped these warnings, leading inexorably to the end of the Agreed Framework only four months later and the host of unresolved challenges that at this writing confront the Bush administration.

The Enrichment Program

The summer of 2002 intelligence findings on North Korea's enrichment activities triggered a succession of events that sharply redefined U.S. policy options on the peninsula. U.S. policy by the end of 2002 seemed reactive if not passive, even as North Korea appeared determined to change facts on the ground as rapidly as

its technical capabilities would allow. Given the limited intelligence data on nuclear developments in the North and the paucity of detailed knowledge about the deliberations of U.S. and North Korean policy makers, any rendering of events during the latter half of 2002 is necessarily incomplete. Many of the contentions by U.S. and North Korean officials remain under dispute, and there are equally divided judgments about the extent and purposes of North Korea's enrichment activities. However, enough information is available to scrutinize critically the available data as well as evaluate various official claims.

Although the administration initially avoided highlighting the mounting evidence of an enrichment program, by the early fall of 2002 this restraint had ended. Indeed, officials from both countries opted to exploit the intelligence for political purposes. To senior American officials who entertained serious reservations about, or were overtly opposed to, U.S.-North Korean nuclear and missile diplomacy, the evidence of North Korean malfeasance furnished powerful ammunition to render the Agreed Framework a dead letter. Other U.S. officials may have hoped that the renewed nuclear crisis might enable a more satisfactory and durable recalibration of earlier agreements. In either event, the changes in U.S. policy toward the North triggered larger policy consequences that have redefined the East Asian political and security landscape.

The existence of a parallel debate in Pyongyang is necessarily more conjectural, though there are some suggestive hints of this possibility. Various North Korean officials had grown increasingly frustrated by what they deemed inattention, unreasonable slights, or outright threats by the Bush administration. As a consequence, leaders in Pyongyang quickly sought to exploit the opening presented by the U.S. decision to cease its commitments under the Agreed Framework. DPRK officials made good on their past veiled threats to resume the North's long-frozen indigenous nuclear program. It is possible that some North Korean officials believed that the breaking of these constraints would enable them to "trade" these resumed activities in subsequent negotiations with the United States. Others may have concluded that they had passed the point of no return with the United States, with the longer-term survival of the DPRK now inextricably tied to the declared possession of nuclear weapons, or at least the far more credible threat of such an option. However, the available information does not allow definitive judgment on this issue. Our intent in the remainder of this article is to: describe what U.S. officials may have believed about the renewed nuclear activities detected in the North; assess how the Bush administration redefined its policy goals toward the North in light of this information; and review how officials in Pyongyang decided to respond to the United States, resulting in the final breakdown of the Agreed Framework in late 2002 and early 2003.

There are two types of fissile material used for nuclear weapons fabrication: weapons-grade plutonium (a by-product of nuclear fission containing sufficient proportions of the plutonium-239 isotope) or uranium enriched to 93 percent with the uranium-235 isotope. 46 Although there are a range of methods to enrich uranium from its natural 0.7 percent content of U-235, gas-centrifuge technology presently constitutes the most practicable, cost-effective method for states intent on pursuing a covert enrichment capability. This still leaves the question of plutonium versus enriched uranium as the preferred path to weapons development. There are advantages and liabilities to both options in terms of reliability and efficiency of design; volatility and availability of materials; complexity, cost, and ability to avoid detection; and the fissile material requirements for different types of nuclear weapon designs. The history of nuclear proliferation suggests that there is no optimal path, though the much larger quantity of fissile material required for weapons using highly enriched uranium would appear to argue for reliance on plutonium. But the properties of a plutonium weapon entail a more complex and less readily predictable bomb design. Each country's nuclear history, moreover, has proven different, depending on the scale of its nuclear ambitions and the specific technologies to which it has gained access.

North Korea's graphite-moderated reactor provided a ready means for plutonium generation once the North had built a reprocessing facility for chemically separating the plutonium in the spent fuel rods removed from the reactor. Though the reactor could generate heat for industrial use, the lack of a power grid at Yongbyon invalidated claims that it was designed for feeding electricity to a grid. However, the nuclear activities covered under the Agreed Framework were limited to declared sites associated with the North's extant reactor program and "related facilities." North Korea was not obligated to allow inspection of any undeclared sites until a "significant portion" of the first LWR was completed.

With both countries putting forward maximal, nonnegotiable policy positions, the subsequent collapse of the Agreed Framework was virtually foreordained.

North Korea had pledged under the Agreed Framework to pursue the goals outlined in the South-North nuclear agreement (including a commitment "not [to] possess nuclear reprocessing

and uranium enrichment facilities"), but DPRK spokesmen now assert that the denuclearization accord is a dead letter, thereby presumably invalidating any pledge not to pursue an enrichment capability.⁴⁷

Equally important, enrichment facilities serve an entirely legitimate civilian purpose—they provide the means for fabricating the low-enriched uranium (i.e., fuel enriched to approximately 4.4 percent uranium-235) to power

light-water reactors. Numerous signatories to the NPT possess such reprocessing capabilities, though under IAEA regulations such sites must be declared and remain open for inspection. Here again, the North may well have believed that it retained wiggle room, pending completion of a significant portion of the first LWR. Absent a more extensive fulfillment of KEDO's milestones, North Korea probably felt little compunction about nondisclosure of its enrichment activities and may have believed that it had little to lose by doing so. The very small circle of DPRK officials who were likely informed about the enrichment efforts probably recognized that early disclosure of these activities would almost certainly trigger a major reaction from an American administration already disinclined to collaborate with the North. It seems entirely plausible that Pyongyang envisioned the need for an indigenous enrichment capability once the LWRs were installed; the fuel requirements for a pair of thousand-megawatt reactors are substantial and open ended. The KEDO-DPRK Reactor Supply Agreement of 15 December 1995 committed KEDO to provide "LWR fuel for the initial loading for each LWR plant . . . in accordance with standard nuclear industry practice." Though KEDO was further obligated "to assist the DPRK to obtain LWR fuel" for the useful life of the reactor, the contracts were to be signed "with a DPRK-preferred supplier," leaving the ultimate choice of a supplier to the North. 48 Given the DPRK's clear determination to avoid long-term dependence on external sources of nuclear fuel, the North may well have been seeking such a capability for itself, or at least wanted to explore the feasibility of such an undertaking. 49 But the acquisition of gas centrifuge technology would also provide the North an alternative if far more protracted path to a nuclear weapons option.

A final but especially significant factor remains overlooked in the larger story of the U.S. intelligence findings—North Korea had no operational enrichment facility to declare. As noted by the CIA in an unclassified November 2002 estimate provided to the Congress, construction of a centrifuge facility was not initiated "until recently. . . . Last year the North began seeking centrifuge-related materials in large quantities. . . . We recently learned that the North is constructing a plant that could produce enough weapons-grade uranium for two or more nuclear weapons per year when fully operational—which could be as early as mid-decade." The intelligence community believed that North Korea still confronted daunting obstacles had it decided to build an enriched-uranium weapon, or even to acquire the production capabilities that might ultimately permit such an option.

Some of these obstacles become clearer by reviewing the technologies involved in these processes.⁵¹ According to Richard Garwin, a leading authority on nuclear power and nuclear weapons design, a U-235 gun-type weapon design requires approximately sixty kilograms of enriched uranium to fabricate

a single weapon, a process that would entail full-time operation of 1,300 highperformance centrifuges for approximately three years to accumulate sufficient fissile material. An implosion-type weapon design akin to that employed by Pakistan in its 1998 tests might require somewhat less than half this amount. By comparison, a nuclear weapon using plutonium requires approximately six kilograms of fissile material, though the needed materials are much more volatile and prone to failure. Garwin defines a high-performance centrifuge as one capable of achieving three separative work units (SWUs) per year, a throughput measure for isotope separation in a single centrifuge. When assembled in a cascade, gas centrifuges yield specific quantities of enriched uranium; depending on the level of enrichment, the resulting product can be applied for civilian or military purposes.⁵² Although more advanced centrifuge technologies now available on the enrichment market enable much higher production rates, there is no possibility that North Korea had access to such state-of-the-art equipment. One report suggests that the centrifuges available to North Korea would have been able to perform at the capacity of as little as one SWU per year, though Matthew Bunn, a leading authority on nuclear proliferation, believes that a capacity two or three times this level is plausible.⁵³

The imprecision in the CIA analysis underscored the difficulties of estimating the extant capabilities and ultimate purposes of the North's enrichment program—a point that begs the question of how complete and compelling the intelligence data may have been on which the United States decided to confront North Korea. (We will return to this issue below.) At the same time, enrichment facilities are inherently dual capable, though the industrial materials required for successful enrichment at much higher levels (i.e., use of maraging steel rather than high-strength aluminum in centrifuge manufacture) is both more expensive and more difficult to acquire. In theory, a facility designed for low enrichment can be converted to high enrichment by the installation of additional centrifuges and tubing, enabling the repeated recycling of uranium hexafluoride gas to achieve higher enrichment levels, though the likelihood of equipment failure would be far higher when relying on more basic enrichment technology. Despite these constraints and the absence of an identified enrichment facility, senior U.S. officials had concluded that North Korea was pursuing an HEU capability, not one designed for civilian use.

As noted by Assistant Secretary of State Kelly, the initial reports of North Korean interest in enrichment technologies antedated the Bush administration. During the late 1990s, there were scattered reports that North Korea was showing an interest in centrifuge technologies as an alternative method for acquiring fissile material. One authority on North Korean weapons development, Joseph S. Bermudez, Jr., dates this interest from as early as the late 1980s. Bermudez cites

without further identification a 1999 Department of Energy document stating that the DPRK "is in the early stages of a uranium enrichment capability" being pursued in conjunction with Pakistan, though the DOE evidently deemed this a pilot activity rather than a precursor to a full-scale program.⁵⁴ Some scattered Japanese and South Korean reports during 1999 and 2000 indicated heightened North Korean interest in uranium-enrichment technologies, as well. According

The January 2003 document did not reiterate the assertions that Pyongyang already possessed one or two weapons.

to one unidentified South Korean Defense Ministry official, "in 1999, our military authorities obtained information that the North was trying to import enriched uranium

production facilities from abroad, and provided the intelligence to the United States."55 The bulk of this reporting focused on the increasingly intertwined relationship between Pakistan and North Korea, which emerged far more fully in press accounts once the United States decided in October 2002 to disclose information about North Korean enrichment activities.⁵⁶

Despite the mounting evidence of North Korean efforts to acquire centrifuge technology, and intelligence findings that confirmed these judgments, the Bush administration initially avoided public disclosure of these findings and opted not to raise these concerns in discussions with Pyongyang. In a later interview Secretary of State Powell acknowledged that he had been apprised of the intelligence assessments before he met with his North Korean counterpart in Brunei at the end of July, conceding that "this enriched uranium program was going on.... Nevertheless, we wanted to move forward with the North Koreans."⁵⁷ It seems quite probable that the administration, wholly absorbed by the looming possibilities of war with Iraq, did not want to be distracted by developments in other regions, no matter how worrisome some may have judged the possibilities. But the fact that North Korea had no operational enrichment capability and was years away from achieving one may have convinced officials that there was no urgency to the issue. It is thus possible that the administration had not yet decided on a preferred course of action. In either case, the new findings did not appear immediately to affect U.S. policy toward the North.

Four weeks later, the stunning disclosure of Japanese prime minister Junichiro Koizumi's impending visit to Pyongyang triggered movement in U.S. policy. 58 The negotiations over a possible Koizumi visit had been conducted with the utmost secrecy within Japanese bureaucratic channels, evidently gaining momentum following renewed overtures from Pyongyang in October 2001.⁵⁹ Following a 25-26 August 2002 visit to Pyongyang, Hitoshi Tanaka, director general of the Asian-Oceanian Affairs Bureau of the Ministry of Foreign Affairs, informed the prime minister that the DPRK leadership was prepared for highly substantive talks, including the history of North Korea's past abductions of Japanese citizens, an issue with deep emotional resonance in Japan. Following Tanaka's return to Tokyo, Koizumi on 28 August immediately ordered accelerated planning for a one-day visit to Pyongyang in mid-September. The prime minister had met the previous day with visiting Deputy Secretary of State Richard Armitage and had informed him of the impending public disclosure of his visit to the North, which was scheduled to be announced on 30 August. Given that messages had been passed between Pyongyang and Tokyo as early as the previous fall, the absence of prior communication between Japan and the United States on the prime minister's impending visit was remarkable enough in its own right. In the context of recent intelligence findings about North Korea's enrichment activities, the prime minister's last-minute disclosure to the United States was even more stunning to American officials.

In the aftermath of the prime minister's meeting with Deputy Secretary Armitage, the Bush administration moved quickly to close the information gap with Tokyo, very possibly beginning with the deputy secretary's immediate reactions to learning about Koizumi's impending plans. In addition, President Bush personally briefed the prime minister on North Korea's nuclear activities during the latter's visit to the United Nations on 12 September. According to one Japanese analyst, the prime minister was "shocked at the harshness" of the president's comments. The U.S. ambassador to Japan, Howard Baker, briefed the prime minister on the new U.S. intelligence findings immediately prior to Koizumi's departure for Pyongyang. It is not known whether the United States urged a postponement or reconsideration of the prime minister's trip, but the Bush administration conveyed that it expected Koizumi to raise vigorously the nuclear issue during his visit.

The prime minister's exchanges with Kim Jong II suggest that Koizumi broached the nuclear issue primarily in terms of North Korea's fulfilling its prior commitments, although he also noted that "the United States has serious concerns about the issue of [North Korea's] nuclear weapons [program]....[North Korea] should accept inspections... to allay the U.S. concerns."62 On the issues of utmost concern to the United States (i.e., North Korean enrichment activities and its ballistic missile development and exports), Koizumi conveyed little urgency. The prime minister may not have fully grasped the import of the new nuclear developments to U.S. policy makers, but he also may have wanted to ensure a successful conclusion to the summit, during which Kim offered unprecedented apologies for the North's past abductions of Japanese citizens. At the same time, Kim Jong II faulted U.S. policies toward the North and made clear that the nuclear issue was not a relevant agenda item for the Japan-DPRK summit. As Kim argued, "The [nuclear] inspection is a problem between the United States

and the DPRK, and is not a topic for this summit."64 It is not at all certain that Kim had any more reason to anticipate the impending accusations by the United States after the Koizumi visit than before it.

The Kelly Visit

In the aftermath of the Japan-North Korea summit, the Bush administration confronted the prospect of abrupt and unanticipated changes in the Northeast Asian political and security environment. The United States believed that Pyongyang had defaulted on fundamental policy commitments to Washington, at the precise moment when the DPRK had opened the door to a new relationship with America's most important Asian ally and, prospectively, a major aid donor to the North. There was a real possibility that U.S. options on the peninsula would be driven increasingly by the policy agendas of others, perhaps enabling Pyongyang to achieve substantial breakthroughs at the expense of U.S. interests and without paying any price for its covert enrichment activities.

A week following Koizumi's meeting with Kim Jong Il, the United States announced plans for the long-deferred visit of Assistant Secretary of State Kelly to North Korea on 3–5 October. State Department spokesmen claimed that Pyongyang had agreed to the comprehensive policy discussions that the administration had sought since the summer of 2001. This characterization suggested the prospect of breakthrough, not breakdown. ⁶⁵ Nothing in the public depiction of the purposes of the Kelly visit even remotely hinted at an impending confrontation in Pyongyang. There is no reason to believe that U.S. officials had conveyed advance hints to the DPRK that the assistant secretary was coming to Pyongyang to deliver a stern message and little else. There is also no evidence to suggest that the United States sought any explanation or clarification from Pyongyang of the U.S. intelligence findings, or that Washington broached these issues with the IAEA prior to the Kelly visit.

Although the United States and North Korea agree on some of the broad details of the four meetings held over two days in Pyongyang, there are some significant differences in their respective renderings. By most accounts, Assistant Secretary Kelly wasted little time on diplomatic niceties, making clear that the U.S. intelligence findings precluded any possible forward movement in U.S.-North Korean relations. Other than informing DPRK officials and rebuking them for the North's evident attempt to circumvent the Agreed Framework, the assistant secretary had no room for maneuver, given the instructions of his superiors. As Kelly himself subsequently observed,

I stated that the United States now had a pre-condition to further engagement—that the DPRK's uranium enrichment program [had to] be dismantled immediately. . . . I did not confront the Vice Foreign Minister [Kim Gye Gwan] with specific evidence of their uranium enrichment program, but I was emphatic that the U.S. knew the program was being aggressively implemented and it was a serious violation of international agreements. I asked the North Korean government to weigh its response carefully.

Kelly further asserts that Vice Foreign Minister Kim "angrily denied that the DPRK had an HEU [highly enriched uranium] program. He dismissed my statement, claiming it was a fabrication." In a final U.S.—North Korean meeting chaired on the DPRK side by First Vice Foreign Minister Kang Sok Ju, Assistant Secretary Kelly observed: "Kang... surprised me by making it quite clear, even before I was able to make my presentation, that North Korea was proceeding with an HEU program and that it considered the Agreed Framework to be 'nullified.'... [H]e tried to blame this situation on U.S. policy under the current Administration, but made no response when I pointed out that the HEU program began well before the current Administration."

The State Department demurred from any immediate disclosures concerning the results of the Kelly visit, not providing relevant details until a teleconference with reporters on 15 October. The congressional resolution endorsing Bush administration policy toward Iraq had been the primary focus of administration policy during the interim period; President Bush signed the resolution only a few hours before the State Department disclosed the outcome of the Kelly visit to reporters. Administration spokesmen contended that North Korea admitted to the existence of a clandestine weapons program, as well as asserting that Pyongyang had declared its intention to terminate the Agreed Framework.

North Korean sources dispute several of the principal U.S. claims, though not the basic outline. In an extended discussion with diplomatic reporter Don Oberdorfer in early November, Vice Foreign Minister Kim Gye Gwan acknowledged that he had been "stunned" by Assistant Secretary Kelly's opening statement. As Oberdorfer relates,

He [Kim] reported Kelly's statements to his superiors at the first coffee break, setting off furious internal consultations. After an all-night meeting of its top officials, North Korea detonated its own verbal explosion the next day. First Deputy Foreign Minister Kang Sok Ju . . . told Kelly that the reclusive nation is "entitled to have nuclear weapons" to safeguard its security in the face of a growing U.S. threat. After a debate of their own, the Americans interpreted the statement to be an admission that Kelly's charge was true.

Other statements cited by Oberdorfer suggest that the North sought to hold the United States accountable for the nullification of the Agreed Framework. In addition, North Korean officials interviewed by Oberdorfer "never denied seeking to enrich uranium in secret facilities, but portrayed their actions as a response to the Bush administration's hostility. . . . [O] ur interlocutors [also] said

North Korea has adopted a 'neither confirm nor deny' policy about whether the program existed before Bush took office. They would also 'neither confirm nor deny' whether North Korea already possesses a nuclear weapon." Kang Sok Ju also insisted that the Agreed Framework, though hanging by "a thread," was not yet deemed inoperative by Pyongyang. ⁶⁹

North Korean officials characterize the 25 October statement from the Ministry of Foreign Affairs as the authoritative DPRK policy document on the Kelly visit. ⁷⁰ It seems reasonable to assume that the statement drew extensively from Kang Sok Ju's rebuttal to Assistant Secretary Kelly. The statement accused the Bush administration of a "hostile attempt . . . to stifle the DPRK by force and backpedal [on] the positive development of the situation in the Korean Peninsula and the rest of Northeast Asia." As the document further alleged, "Producing no evidence, [Assistant Secretary Kelly] asserted that the DPRK has been actively engaged in the enriched uranium program in pursuit of possessing nuclear weapons in violation of the DPRK-U.S. Agreed Framework. He even intimidated the DPRK side by saying there would be no dialogue with the U.S. unless the DPRK halts [its enrichment activities], and the DPRK-Japan and North-South relations would be jeopardized."

Though not expressly contesting U.S. claims, the report accused the United States of continuing to threaten the DPRK with nuclear weapons and of failing to carry out nearly all of its obligations under the Agreed Framework, "calculating that the DPRK would collapse sooner or later." According to the MFA statement, American characterizations of North Korea as part of the "axis of evil" and as a prospective target for "preemptive nuclear strike" were "a gross violation of the basic spirit of the Nonproliferation Treaty, [and] reduced the inter-Korean joint declaration on denuclearization to a dead document." The statement concluded, "Nobody would be so naïve as to think that the DPRK would sit idle under such a situation. That was why the DPRK made itself very clear to the special envoy of the U.S. president that the DPRK was entitled to possess not only nuclear weapons but any type of weapon more powerful than that so as to defend its sovereignty and right to existence from the ever-growing nuclear threat by the U.S."

The Ministry of Foreign Affairs document then presented the basis for a "grand bargain," one that had reportedly been aired in the Kelly-Kang exchanges:

The DPRK, with greatest magnanimity, clarified that it was ready to seek a negotiated settlement of this issue on the following three conditions: firstly, if the U.S. recognizes the DPRK's sovereignty; secondly, if it assures the DPRK of nonaggression; and thirdly, if the U.S. does not hinder the economic development of the DPRK....

[T]he DPRK considers that it is a reasonable and realistic solution to the nuclear issue to conclude a nonaggression treaty between the DPRK and the U.S.... If the U.S.

legally assures the DPRK of nonaggression, including the nonuse of nuclear weapons against it by concluding such a treaty, the DPRK will be ready to clear the former of its security concerns.

There were no explicit calls for financial compensation from the United States. All subsequent North Korean statements, to this writing, essentially adhered to the proposals outlined in the 25 October document.

However, the administration seemed determined to deny Pyongyang the satisfaction of a direct response to this or to succeeding statements, which senior officials contended would reward North Korea for its violations of the Agreed Framework and related nonproliferation commitments. Administration spokesmen repeatedly insisted that the renewed confrontation did not constitute a crisis but a "serious situation," to which they sought a "peaceful resolution ... through diplomatic channels."⁷² Subsequent declarations (including several by President Bush) emphasized that the administration had "no hostile intent" toward Pyongyang, "no intention to invade" the North, or (less frequently) "no intention to invade or attack" the DPRK. 73 But the administration insisted that pursuit of a diplomatic option did not extend to direct negotiations with North Korea, only to consultations with Pyongyang's neighbors. Senior administration officials repeatedly asserted that regional actors had more influence over the DPRK and would therefore be better able than the United States to induce the North to reverse its renewed nuclear activities. This claim justified the U.S. decision not to pursue a direct channel to Pyongyang. To varying degrees, the ROK, Japan, Russia, and China all disagreed with the administration's declaration that it would "talk" but not "negotiate" with the DPRK. But the United States remained unmoved by the calls of North Korea's immediate neighbors for Washington to seek a bilateral understanding with Pyongyang.

The administration also faced a profound disparity in its strategies and policies toward Iraq and North Korea, the only two countries identified as "rogue states" in the September 2002 national security strategy document. Despite North Korea's far greater military power, its vastly more developed nuclear and missile capabilities, the immediate threat that North Korea posed to U.S. military personnel deployed on the Korean peninsula, and its widespread sales of ballistic missiles in highly volatile regions, President Bush continued to insist that Iraq represented a "unique" case that had to assume precedence in U.S. military plans. American officials asserted that there were four essential differences between the two cases: North Korea had not used WMD capabilities against its own people or against neighboring states; the DPRK was not in defiance of Security Council resolutions; North Korea was not accused of any current links to terrorist groups; and the United States believed that regional actors (especially

China) had a greater capacity to pressure or induce Pyongyang to forgo its nuclear weapons capabilities and to dismantle its extant programs.

The administration devoted far less public attention to other factors that dominated its strategies toward the North. First, the United States had neither the desire nor the wherewithal to activate a second major military front simultaneous with the mounting possibilities of war with Iraq. Decisions on Korea policy would be deferred, pending the outcome of the Iraq crisis. Second, U.S. defense planners were keenly aware of the lack of realistic military options for definitively eliminating the North's nuclear weapons potential. Even if U.S. planners contemplated a disabling strike on the reprocessing plant, it seemed highly likely that such an action would trigger a major North Korean attack on the South as well as a profound crisis in the U.S.-ROK alliance. Third, the United States believed that North Korea's own military options were also highly circumscribed, and possession of a few nuclear weapons would not appreciably alter this assessment.75

Fourth, despite the administration's dire warnings about the North's enrichment activities, most officials recognized that the path to a meaningful enrichment capability remained a distant and very uncertain possibility. This more patient view presumably did not apply as fully to the prospective reactivation of Pyongyang's plutonium program, which received less attention in the immediate aftermath of the enrichment disclosures. At least initially, the administration did not appear overly exercised by either potential path to weapons development. This may have reflected a predominant U.S. view that Pyongyang was seeking to induce the United States to resume direct negotiations, rather than proceeding directly to finished weapons. Fifth, the administration did not want to repeat what it deemed its predecessor's grievous errors in its negotiations with Pyongyang. The United States could therefore afford to wait and let Pyongyang incur the international opprobrium that would inevitably follow its nuclear defiance. This included the halting of any prospective forward movement in Japanese–North Korean relations. Sixth, some may have believed that time was simply not on Pyongyang's side. A policy of international ostracism, containment, and reinforced defense (including missile defense) would deny Pyongyang any presumed political gains from its nuclear and missile programs and might even lead to the ultimate collapse of the North Korean system, even if such an outcome might trigger severe instability and potential military dangers.

With the United States unwilling to engage in direct substantive exchanges with North Korea and with Pyongyang seeking to turn the tables on Washington, the impasse that materialized at the time of Assistant Secretary Kelly's visit had grown wider.

THE AGREED FRAMEWORK UNRAVELS

The deadlock in U.S.–North Korean relations evident in early October quickly went from bad to worse. The Bush administration was unprepared to resume direct negotiations with Pyongyang, and the DPRK proved equally unwilling to reverse course. The fate of the Agreed Framework hung in the balance, as both states deliberated their next steps. As early as 19 October, senior administration officials informed David Sanger of the *New York Times* that the Agreed Framework "as we know it is dead," while still leaving undetermined whether Washington would abandon the agreement in its entirety.⁷⁷ The immediate issue was the continuation of the U.S. monthly heavy-fuel-oil allotment to Pyongyang, as stipulated under the Agreed Framework. The oil delivery for October had proceeded as planned, but the administration had not decided whether to proceed with future deliveries.

The policy debate was fought openly in the press. On 24 October, a senior State Department official participating in the Asia-Pacific Economic Cooperation (APEC) meeting in Mexico informed Karen DeYoung of the *Washington Post* that he was not yet prepared to characterize the Agreed Framework as dead: "I have not yet used the four-letter word—[and] have no plans to do so, at least at this time.

Had its ongoing activities not been halted, North Korea would have ultimately developed the means to fabricate significant numbers of nuclear weapons. No decision has been made....I'm not ruling out direct contact or communications with the North Koreans. If they call us, we'll listen, and I hope vice versa. But that's not negotiating."⁷⁸ The next day,

speaking to the same newspaper, a senior administration official in Washington excoriated the State Department source in exceedingly blunt terms, characterizing the previous day's statement as a "serious breach" in U.S. policy that suggested "a State Department in revolt." The senior official stated, "There is a discipline problem here, whether it's the person who did the [Mexico] briefing, or someone else in the State Department.... [W]hat that person said... may represent his view, the State Department view, but it does not represent the administration view."

In the aftermath of this open contention, the administration soon made its decision: the United States, with the concurrence of the ROK and Japan, opted to suspend further heavy-fuel-oil deliveries to the DPRK. This decision proved fateful. A week later Pyongyang declared that the Agreed Framework had collapsed, arguing that the deliveries were the only portion of the agreement that the United States had ever carried out. An IAEA resolution of 29 November urging the North's immediate compliance with its nonproliferation obligations was brusquely rejected in a 2 December letter from Foreign Minister Paik Nam Soon to Mohamed ElBaradei, general director of the IAEA Board of

Governors.⁸² On 12 December, the DPRK Foreign Ministry spokesman, claiming acute energy shortages following suspension of the fuel oil shipments, declared that the North would end its commitment to the Agreed Framework, restart operations at its mothballed nuclear facilities, and resume construction of the larger reactors suspended in 1994.83

The 12 December announcement initiated a succession of audacious, unilateral actions that in a matter of weeks began to roll back much of North Korea's eight years of nuclear restraint. In rapid succession, North Korea requested on 13 December that the IAEA withdraw its seals and cameras from the DPRK's declared facilities; stated on 19 December that the Agreed Framework now existed "in name only"; removed or otherwise disabled the locks and monitoring equipment at the reactor, cooling pond, fuel fabrication plant, and reprocessing facility—all between 21 and 24 December; announced the intended expulsion of the IAEA inspectors on 27 December, even as the inspectors reported that two thousand fresh fuel rods had already been loaded into the reactor; and notified the IAEA of its intention to reactivate its fuel reprocessing facility within several months, purportedly to ensure the safety of spent fuel rods that would be removed and stored following their use in the reactivated reactor and (once completed) in the larger reactors, where construction was expected to resume.

On 29 December, the Foreign Ministry spokesman declared that there was no way "to internationalize the nuclear issue on the Korean Peninsula.... [I]t is universally known that [this] issue . . . should be solved between the DPRK and the U.S., as it is the product of the latter's hostile policy in every respect." Accordingly, the spokesman declared that American actions were "compelling us to withdraw from the NPT"; only a legally binding security guarantee from the United States (including a nonaggression treaty with the DPRK) would satisfy Pyongyang. 84 On 10 January 2003, the DPRK announced its "automatic and immediate" effectuation of its withdrawal from the NPT and its "complete free[dom] from the restrictions of the safeguard agreement with the IAEA." Despite the national security justifications that pervaded the document, the DPRK statement presented its actions as necessitated by energy exigencies: "Although we withdraw from the NPT, we have no intention to make nuclear weapons; and in the current stage, our nuclear activities will be limited to only peaceful purposes, including electricity production. If the United States suspends its hostile crushing policy on us and clears away the nuclear threat, we could prove, through a separate verification between the DPRK and the United States, that we do not make nuclear weapons."85 Pyongyang therefore sought to maintain its claims to special status that had pervaded its nuclear diplomacy since 1993. But the North couched its withdrawal from the treaty in terms that did not preclude an overt declaration of nuclear-weapons status at a future date.

Despite North Korea's abrupt reactivation of its plutonium program and its announced withdrawal from the NPT, the Bush administration maintained the studied equanimity evident since the nuclear confrontation became public knowledge in mid-October. There was a late-December initiative for a policy of "tailored containment" and periodic hints of flexibility should North Korea relent from its course of action, but the essence of the administration's approach remained unchanged—there would be no resumption of direct negotiations with the North. 86 The hints of flexibility were likely intended to reassure the incoming ROK presidential administration of Roh Moo-hyun, who had already voiced major reservations about U.S. policy toward the North. The Bush administration's continued insistence that North Korea's actions did not constitute a crisis reflected its determination to deny Pyongyang what it sought above all—a bilateral agreement with the United States, with both countries "sitting knee to knee."87 It also seems likely that the administration was caught flat-footed by the speed and decisiveness with which Pyongyang had reactivated its long-dormant plutonium program.

Pyongyang's reaction to the cutoff of U.S. oil supplies suggested careful planning and execution, and a determination to change realities on the ground while the opportunity presented itself. Justifying its behavior by the inattention and misdeeds of its principal adversary was a time-honored North Korean strategy. It is possible that the DPRK might have ultimately decided to reactivate its plutonium program on its own initiative, but the oil cutoff made it far easier for Pyongyang to justify its actions. Putting aside the North's alarmist renderings of U.S. policy, President Bush and various senior administration officials regarded North Korea as an illegitimate government and a direct threat to vital U.S. security interests. Yet a profound contradiction persisted between the administration's ominous portrayal of North Korea in the new national security strategy document and the seeming composure with which the United States reacted to Pyongyang's flouting of its nonproliferation obligations, especially in comparison to the administration's single-minded focus on Iraq.

However, as North Korea steadily reactivated its plutonium program, senior administration officials began to warn that President Bush was keeping "all military options open." As further stated by Assistant Secretary of State Kelly in mid-March 2003, the administration was "determined that North Korea not become a nuclear power, acknowledged or unacknowledged," without any administration official indicating what measures Washington might contemplate to prevent such an outcome. 89

By discarding the Agreed Framework, the United States and North Korea decided that they preferred living with future uncertainties and dangers to sustaining or modifying an imperfect formula that had capped Pyongyang's nascent

nuclear-weapons program for nearly a decade. Over the longer run, it is possible that a successor to the 1994 accord addressing the declared concerns of both countries and of neighboring states might reconstitute previous constraints. At this writing, however, neither state exhibits much interest in such an outcome. Should Washington and Pyongyang adhere to the equivalent of default options as their long-term policies, a declared North Korean nuclear-weapons capability and the severest of future crises could yet loom. One or both states might ultimately be sobered by these possibilities, but this realization is not at hand.

26 March 2003

NOTES

- 1. Unclassified Report to the Congress on the Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, 1 January through 30 June 2001 (Washington, D.C.: Central Intelligence Agency, January 2002), p. 5; Glenn Kessler, "No Support for Strikes against North Korea," Washington Post, 2 January 2003.
- 2. Foreign Missile Developments and the Ballistic Missile Threat Through 2015 (Washington, D.C.: National Intelligence Council, December 2001), p. 12. Emphasis added. The wording in this document is ambiguous. If the report was claiming that U.S. intelligence analysts had concluded that North Korea had produced these weapons in the mid-1990s, it reflected either reinterpretation of old data or the inclusion of new information in older estimates. If the authors were claiming that the CIA had made this determination in the mid-1990s, then the claim is patently false, or all intelligence assessments published in the 1990s were false, in as much as the December 2001 claim contradicts all intelligence assessments published during the latter half of the
- 3. CIA Report to the U.S. Congress on North Korea's Nuclear Weapons Potential, 19 November 2002, as published on the website of the Federation of American Scientists (www.fas.org/nuke/guide/dprk/nuke/cia111902.html). Emphasis added.
- Unclassified Report to Congress on the Acquisition of Technology Related to Weapons of Mass Destruction, 1 July Through 31

- December 2001 (Washington, D.C.: Central Intelligence Agency, January 2003), p. 5.
- 5. For relevant background, see David E. Sanger and James Dao, "U.S. Says Pakistan Gave Technology to North Korea," New York Times, 17 October 2002; Joby Warrick, "Quest for Metal Was Tip-Off," Washington Post, 18 October 2002; Doug Struck and Glenn Kessler, "Hints on North Korea Surfaced in 2000," Washington Post, 19 October 2002; Carla Anne Robbins and Zahid Hussain, "North Korea Had Russian Parts Suppliers," Wall Street Journal, 21 October 2002; Dan Stober and Daniel Sneider, "U.S. Knew about Nuclear Link Between North Korea, Pakistan," San Jose Mercury News, 23 October 2002; Kessler, "Pakistan's North Korea Deals Stir Scrutiny: Aid to Nuclear Arms Bid May Be Recent," Washington Post, 13 November 2002; and Sanger, "In North Korea and Pakistan, Deep Roots of Nuclear Barter," New York Times, 21 November 2002.
- 6. This paragraph draws on an unclassified CIA estimate on North Korean nuclear weapons potential provided to the U.S. Congress, 19 November 2002 (fn. 3). However, on 12 March 2003, James Kelly, Assistant Secretary of State for East Asian and Pacific Affairs, sharply contradicted this assessment. In testimony to the Senate Foreign Relations Committee, Kelly stated: "The enriched uranium issue which some have assumed is somewhere off in the fog of the distant future is not.... It is only probably a matter of months, not years, behind the plutonium [program]." Kelly provided no further elaboration or

- supportive technical data to substantiate this claim, nor did he allude to the CIA estimate issued four months earlier that put forward a much more cautionary estimate of the DPRK's enriched uranium potential. Despite his much less equivocal judgment, he also acknowledged "serious limitations... [in the U.S.] ability to verify the uranium enrichment [program]." See his remarks in "Regional Implications of the Changing Nuclear Equation on the Korean Peninsula," Hearing of the Senate Foreign Relations Committee, Federal News Service, 12 March 2003, pp. 9–10.
- "President George Bush Discusses Iraq in National Press Conference," 6 March 2003, www.whitehouse.gov/news/releases/20003/ 03/20030306-8.html, p. 4.
- 8. See, for example, the comments of Deputy Secretary of State Richard Armitage in the summer of 2001. "U.S. Official Downplays Rocket Test," *Washington Times*, 7 July 2001.
- 9. For additional background, see James A. Kelly, "United States to North Korea: We Now Have a Pre-Condition," YaleGlobal Online, 12 December 2002. This article draws on a presentation by Assistant Secretary Kelly to a symposium at the Woodrow Wilson International Center for Scholars, Washington, D.C., 11 December 2002. The Kelly visit will be addressed in greater detail later in this article.
- 10. Sanger, "North Korea Says It Has a Program on Nuclear Arms," New York Times, 17 October 2002. However, in a subsequent interview, Assistant Secretary Kelly characterized Kang's statement in different terms, with Kang (according to Kelly) stating that the Agreed Framework "had been nullified by [U.S.] actions." PBS NewsHour interview, 5 November 2002.
- 11. For relevant details, see the report on these facilities in *Yomiuri Weekly* (Tokyo), 1 December 2002, pp. 14–16.
- 12. On North Korean missile development and exports, consult Ko Yon-chol, "Mechanism of North Korean Missile Development," *Gunji Kenkyu* (Tokyo), February 2003, pp. 190–201.
- 13. For a powerful account, see Andrew S. Natsios, The Great North Korean Famine: Famine, Politics, and Foreign Policy (Washington, D.C.: U.S. Institute of Peace Press, 2001).

- 14. For an enlightening account drawing on extensive access to North Korean officials, albeit a study diminished by uncritical acceptance of Pyongyang's views of the negotiating record, see Selig S. Harrison, Korean Endgame: A Strategy for Reunification and U.S. Disengagement (Princeton, N.J.: Princeton Univ. Press, 2002).
- 15. For several sharply contrasting assessments of North Korean negotiating strategy, see Leon V. Sigal, Disarming Strangers: Nuclear Diplomacy with North Korea (Princeton, N.J.: Princeton Univ. Press, 1998); Chuck Downs, Over the Line: North Korea's Negotiating Strategy (Washington, D.C.: American Enterprise Institute Press, 1999); and Scott Snyder, Negotiating on the Edge: North Korean Negotiating Behavior (Washington, D.C.: U.S. Institute of Peace Press, 1999).
- This analysis draws extensively on "Chronology of U.S.-North Korean Nuclear and Missile Diplomacy (December 1985–October 2002)," Arms Control Today (November 2002), pp. 32–37.
- 17. For relevant background, consult Larry A. Niksch, North Korea's Nuclear Weapons Program (Washington, D.C.: Congressional Research Service Issue Brief, Library of Congress, 8 November 2002), esp. pp. 9–14.
- 18. For a detailed chronology, see International Atomic Energy Agency [hereafter IAEA], "Fact Sheet on DPRK Nuclear Safeguards" (Vienna: WWW-Text, 16 December 2002).
- 19. North Korea's repeated claims to "special status" under the NPT date from its June 1993 "suspension" of its intention to withdraw from the treaty announced the previous March; this issue was to recur at the time of the renewed nuclear crisis in late 2002.
- 20. The references throughout this article to the reactor's five-megawatt capacity pertain to its electrical potential, not its thermal capability.
- 21. For an account of U.S. policy deliberations by two senior DoD officials at the time, see Ashton B. Carter and William J. Perry, "Back to the Brink," *Washington Post*, Outlook section, 20 October 2002.
- 22. Kim Il Sung died abruptly in July 1994, only weeks after meeting with former president Carter. After a period of national mourning, Kim Jong Il succeeded his father in power,

- though he lacked comparable stature and authority.
- 23. Agreed Framework between the Democratic People's Republic of Korea and the United States of America, Geneva, 21 October 1994. The signers of the document were First Vice Minister of Foreign Affairs Kang Sok Ju (Assistant Secretary of State Kelly's principal interlocutor in Pyongyang in October 2002 as well as a visitor to the White House in October 2000) and U.S. Ambassador at Large Robert Gallucci.
- 24. CIA estimate to the U.S. Congress on North Korea's nuclear weapons potential (fn. 3 above).
- 25. There are a range of estimates about the fissile material requirements for a plutonium weapon. According to declassified data from the U.S. Department of Energy, "about 6 kilograms of plutonium is enough hypothetically to make one nuclear explosive device." But DOE also asserts that "hypothetically, a mass of 4 kilograms of plutonium or uranium-233 is sufficient for one nuclear explosive device." U.S. Dept. of Energy, Restricted Data Declassification Decisions 1946 to the Present, RDD-7 (Washington, D.C.: Office of Declassification, 1 January 2001), p. 31. The document is available at Federation of American Scientists, www.fas.org/sgp/othergov/doe/ rdd-7.html. The DOE data are hypothetical estimates of fissile material requirements based on weapons physics, not a specific judgment on the characteristics of a particular weapon design. I employ a six-kilogram estimate in this article. For a very helpful discussion, consult David Albright, North Korea's Current and Future Plutonium and Nuclear Weapons Stocks (Washington, D.C.: Institute for Science and International Security [ISIS] Issue Brief, 15 January 2003).
- 26. According to Peter Hayes, a leading authority on North Korean energy economics, the U.S. heavy fuel oil (HFO) deliveries provided approximately 8 percent of the DPRK's electrical supply in 2000, and approximately one-third of the fuel for the North's thermal power plants, which furnished half of the North's total generating capacity. However, Hayes further notes that "the DPRK has always viewed . . . HFO delivery [as] a political litmus test of American intent with regard [to] realizing [North Korea's] strategic goals

- from their nuclear fuel cycle strategy . . . and not a fuel supply issue." Hayes, "KEDO Fuel Oil and the DPRK: A Special Report," *Northeast Asia Peace and Security Network, Special Report*, 15 November 2002.
- 27. President Clinton's 20 October 1994 letter to Kim Jong II is reprinted in James M. Minnich, *The Denuclearization of North Ko-rea* (Bloomington, Ind.: First Books Library, 2002), p. 106.
- 28. For a detailed and careful analysis, see Lee Chol-gi, "The North Korea–U.S. Geneva Agreement: Implications and Violations," Vantage Point (Seoul), December 2002, pp. 45–54. On the Agreed Framework timelines and results, consult Ralph A. Cossa, The U.S.-DPRK Agreed Framework: Is It Still Viable? Is It Enough? (Honolulu: Pacific Forum CSIS, April 1999), especially pp. 9–13 and Appendix F. Operational definitions of relevant criteria and milestones are specified in annexes 3 and 4 of the KEDO-DPRK Reactor Supply Agreement of 15 December 1995, as reprinted in Minnich, The Denuclearization of North Korea, pp. 123–25.
- 29. For a critique prepared principally by individuals who would subsequently assume senior positions in the Bush administration, see Richard L. Armitage, A Comprehensive Approach to North Korea, Strategic Forum 159 (Washington, D.C.: National Defense Univ., Institute for National Strategic Studies, March 1999). The essential argument in the Armitage report was that the Agreed Framework was not so much flawed as incomplete and thus unlikely to provide an enduring solution to the North's nuclear and missile activities.
- 30. For a useful compendium of North Korean statements, see "North Korea's Stance Regarding the Agreed Framework," *Vantage Point* (Seoul), November 2002, pp. 13–15.
- 31. In February 2003, President Kim Dae-jung publicly acknowledged for the first time that South Korean intelligence in 2000 had funneled (through a Hyundai subsidiary) substantial cash payments to the North in exchange for Kim's invitation to visit Pyongyang. Estimates of these payments range as high as five hundred million dollars. Kim's admission confirmed reports that had circulated for some months within the ROK and had become matters of growing political

- controversy. Howard W. French, "South Korea Chief Says North Received Cash in Bid for Peace," *New York Times*, 14 February 2003.
- 32. All citations are drawn from *Report of United States Policy toward North Korea: Findings and Recommendations*, Unclassified Report by Dr. William J. Perry, U.S. North Korea Policy Coordinator and Special Advisor to the President and the Secretary of State (Washington, D.C.: 12 October 1999).
- 33. U.S.-DPRK joint communiqué, 12 October 2000.
- 34. For an insightful account drawing on access to interviews with officials involved in Clinton administration policy on which this paragraph draws, consult Elise M. Vander Vennett [Lt. Col., USAF], "Averting a Rush to Failure: The Interagency Process and United States—North Korea Policy" (Washington, D.C.: National Defense Univ. and National War College, n.d.)
- 35. Harrison, *Korean Endgame*, p. 228. Secretary Albright purportedly conveyed this information in several small group discussions attended by Harrison. In announcing his decision not to travel to Pyongyang, President Clinton stated that during the Albright visit "Chairman Kim put forward a serious proposal concerning his missile program. Since then, we have discussed with North Korea proposals to eliminate its missile export program as well as halt further missile development." White House, Office of the Press Secretary, Washington, D.C., 28 December 2000.
- 36. Both MFA quotes are cited in "North Korea's Stance Regarding the Agreed Framework" (fn. 30), pp. 14–15.
- 37. This characterization was offered by State Department spokesman Richard Boucher in his briefing on the Powell-Lee meeting, 7 February 2001.
- 38. According to Woodward, President Bush stated: "I loathe Kim Jong Il. I've got a visceral reaction to this guy because he is starving his people. They tell me, we don't need to move too fast [against Kim] because the financial burdens on people will be so immense if we try to—if this guy were to topple. I just don't buy that. Either you believe in freedom, and . . . worry about the human condition, or you don't. . . . [T]here is a value

- system that cannot be compromised." Bob Woodward, *Bush at War* (New York: Simon and Schuster, 2002), p. 340.
- 39. Jane Perlez, "Fatherly Advice to the President on North Korea," *New York Times*, 10 June 2001.
- 40. Jane Perlez, "U.S. Will Restart Wide Negotiations with North Korea," New York Times, 7 June 2001. For the fullest statement of administration policy (from which the above citations are drawn), see Charles L. Pritchard, "U.S. Policy toward the Democratic People's Republic of Korea," testimony of the special envoy for negotiations with the DPRK and U.S. representative to KEDO before the Subcommittee on East Asia and the Pacific, House Committee on International Relations, 26 July 2001.
- 41. Michael Gordon, "U.S. Toughens Terms for Talks with North Korea," New York Times, 3 July 2001; Jane Perlez, "Powell Says U.S. Wants to Resume Talks with North Korea," New York Times, 28 July 2001.
- 42. Findings of the Nuclear Posture Review (Washington, D.C.: Dept. of Defense, 9 January 2002); on the subsequent NPR disclosures, see William M. Arkin, "Secret Plan Outlines the Unthinkable," *Los Angeles Times*, 10 March 2002. For relevant discussion of North Korea in the national security strategy document, including the attention to preemption and to counterproliferation, see *The National Security Strategy of the United States of America* (Washington, D.C.: White House, 17 September 2002), pp. 13–16.
- National Strategy to Combat Weapons of Mass Destruction (Washington, D.C.: White House, December 2002), p. 3.
- 44. See Secretary of State Powell's testimony to the Senate Foreign Relations Committee, 5 February 2002.
- 45. The statement is cited in "North Korea's Stance Regarding the Agreed Framework" (fn. 30 above), p. 15.
- 46. For a superb analysis of the full spectrum of these issues, consult Richard L. Garwin and Georges Charpak, Megawatts and Megatons: A Turning Point in the Nuclear Age? (New York: Knopf, 2001), esp. chaps. 2, 3, 5, and 12.
- 47. See, for example, the exchange between Peter Hayes of the Nautilus Institute for Security and Sustainable Development and Kim

- Myong Chol, executive director of the Center for Korean-American Peace in Tokyo and an unofficial spokesman for the DPRK, in *Nautilus Institute Northeast Asia Peace and Security Network, Special Report*, 25 October 2002.
- 48. KEDO-DPRK Reactor Supply Agreement, Articles VI and VIII, in Minnich, *The* Denuclearization of North Korea, pp. 112–13.
- 49. According to a report by a close observer of the global nuclear industry, "the DPRK has [recently] let it be known that it was keenly interested in the front end of the [nuclear] fuel cycle and uranium processing, claiming to some Western officials in the country that [its] interest was prompted by a desire to supply fuel for the two [LWRs] being constructed under the Agreed Framework." Mark Hibbs, "DPRK Enrichment Not Far Along, Some Intelligence Data Suggest," Nucleonics Week, 24 October 2002, p. 1.
- 50. Unclassified CIA Estimate to the U.S. Congress, 19 November 2002 (fn. 3 above).
- 51. I am much indebted to Richard Garwin for his very valuable insights into these issues.
- Robert F. Mozley, The Politics and Technology of Nuclear Proliferation (Seattle: University of Washington Press, 1998), pp. 79–81.
- 53. My thanks to Matthew Bunn for his judgments. For the lower SWU estimate, see Mark Hibbs, "CIA Assessment on DPRK Presumes Massive Outside Help on Centrifuges," Nucleonics Week, 25 November 2002, p. 1.
- 54. Joseph S. Bermudez, Jr., "Exposing North Korea's Secret Nuclear Infrastructure," *Jane's Intelligence Review*, August 1999, p. 45.
- 55. As reported by Yonhap, the ROK semiofficial news agency, 21 October 2002. See also Sankei Shimbun (Tokyo), 9 June 2000; and Sindong-a (Seoul), 1 August 2001, pp. 196–204. The latter two reports document the existence of a major undeclared facility for nuclear materials production inside Mount Chonma, thirty kilometers from the Kumch'ang-ri site inspected by U.S. officials in 1999 and 2000.
- 56. For a detailed and revealing reconstruction of the Pakistan–North Korea nuclear and missile relationship, see Gaurav Kampani, "Second Tier Proliferation: The Case of Pakistan and North Korea," *Nonproliferation Review*,

- Fall–Winter 2002, pp. 107–16. For additional background, see Seymour M. Hersh, "The Cold Test," *The New Yorker*, 27 January 2003, pp. 42–47; and Walter Pincus, "North Korea's Nuclear Plans Were No Secret," *Washington Post*, 1 February 2003.
- 57. Secretary Powell is quoted in Pincus, "North Korea's Nuclear Plans Were No Secret."
- 58. For an insightful analysis of Japanese policy calculations related to the Pyongyang visit, see Gilbert Rozman, "Japan's Relations with the U.S. and Its North Korean Option," *Foreign Policy Research Institute E-Notes*, 3 December 2002.
- 59. For relevant details on which this account draws, see "Chronicle: Prime Minister Koizumi's Surprise Visit to North Korea," *Kyodo Clue II* (Tokyo), Internet version, 30 August 2002. See also Takao Toshikawa, "Senior Government Officials Say Kim Jong Il 'Denounced the United States' in the Summit Talks," *Gendai* (Tokyo), November 2002, pp. 48–51.
- Doug Struck and Glenn Kessler, "Hints on North Korea Surfaced in 2000," Washington Post, 19 October 2002.
- 61. One Japanese newspaper account asserts that "the U.S. was taken aback when it learned that Japan had agreed to hold a summit meeting with North Korea. The U.S. expressed misgivings, turned over materials to Prime Minister Koizumi which proved that Pyongyang was pursuing a uranium enrichment program, and urged Japan to postpone the meeting." "Kim Jong Il's Miscalculation," Mainichi Daily News (Tokyo), Internet version, 31 December 2002.
- 62. As reported in *Asahi Shimbun* (Tokyo), 18 September 2002.
- 63. Howard W. French, "North Koreans Sign Agreement with Japanese," New York Times, 18 September 2002.
- 64. As cited by Toshikawa (fn. 59 above).
- 65. David E. Sanger, "In Policy Shift, U.S. Will Talk to North Korea," *New York Times*, 26 September 2002.
- 66. Kelly, "United States to North Korea," fn. 9 above, pp. 2–3.
- 67. Ibid., p. 3.

- Mike Allen and Karen DeYoung, "North Korea Issue Irks Congress," Washington Post, 19 October 2002.
- 69. Don Oberdorfer, "My Private Seat at Pyongyang's Table," *Washington Post*, Opinion section, 10 November 2002. As noted previously, in a television interview Assistant Secretary Kelly lent credibility to this North Korean claim, noting that Kang Sok Ju stated that "the Agreed Framework had . . . been nullified by [U.S.] actions." *PBS NewsHour* interview, 5 November 2002.
- 70. Statement of the spokesman of the DPRK Foreign Ministry on the nuclear issue on the Korean Peninsula, 25 October 2002. Ambassador Donald Gregg (who led the small delegation of which Don Oberdorfer was also a member) confirmed to me that his North Korean interlocutors deemed this statement the authoritative representation of DPRK policy. However, other North Korean statements contradict the 25 October statement, with some officials denying that Pyongyang acknowledged either enrichment activities or an active nuclear weapons program. "DPRK Foreign Ministry Director [O Song-ch'ol] Says DPRK 'Did Not Acknowledge' Nuclear Program," Choson Sinbo (Tokyo), Internet Version in Korean, 23 January 2003.
- 71. The reference to "any type of weapon more powerful than [nuclear weapons]" sounds especially ominous, and has been widely construed as an allusion to biological weapons or other WMD capabilities. However, such allusions are a staple in North Korean political vocabulary, and appear to refer to the boundless power attributed to DPRK political ideology and leadership doctrines. As observed by Deputy Secretary of State Richard Armitage: "We [first] didn't understand what these weapons might be. . . . We have subsequently learned from foreign envoys who have gone to Pyongyang and talked to the North Koreans . . . that they're referring to . . . the soul and special affection of the Korean people for the army-first policy, united behind the direction of Kim Jong Il." Armitage, Testimony before the Senate Foreign Relations Committee, 4 February 2003.
- Peter Slevin and Glenn Kessler, "Bush Emphasizes Diplomacy Toward North Korea," Washington Post, 18 October 2002.

- 73. President Bush first declared that the United States "ha[d] no intention to invade the North" during his February 2002 visit to the ROK. Numerous statements from the White House have reiterated this pledge, and other administration spokesmen have asserted either that the United States "had no intention to attack" or "no intention to invade or attack." It is not clear whether these variations represented efforts to differentiate U.S. policy. In light of subsequent U.S. statements that "all options" remained on the table, the administration did not view its earlier statements as foreclosing the use of force under certain circumstances. For various versions, see Glenn Kessler, "U.S. Takes North Korea's Nuclear Plan in Stride," Washington Post, 13 December 2002; David E. Sanger, "Bush Welcomes Slower Approach to North Korea," New York Times, 7 January 2003; "U.S. 'Willing to Talk' to North Korea," briefing remarks by State Department spokesman Richard Boucher, 7 January 2003; Secretary of State Colin Powell, testimony delivered to the Senate Foreign Relations Committee, 6 February 2003; and Mark Matthews and David L. Greene, "Bush Says Force Now an Option on North Korea," Baltimore Sun, 4 March 2003.
- 74. Elisabeth Bumiller, "Bush Sees Korean Nuclear Effort as Different from Iraq's," *New York Times*, 22 October 2002; David E. Sanger, "Bush Contends That North Korea Is No Iraq," *New York Times*, 1 January 2003.
- 75. This contention was put forward most explicitly by Secretary of State Powell. David E. Sanger, "U.S. Eases Threat on Nuclear Arms for North Korea," New York Times, 30 December 2002.
- 76. However, Assistant Secretary of State Kelly's March 2003 testimony to the Senate Foreign Relations Committee (fn 6, above) directly contradicts this judgment.
- 77. David E. Sanger, "U.S. to Withdraw from Arms Accord with North Korea," New York Times, 20 October 2002.
- Karen DeYoung, "U.S. Might Try to Salvage Part of North Korean Accord," Washington Post, 25 October 2002.
- 79. Mike Allen and Karen DeYoung, "Bush Seeks China's Aid to Oppose North Korea; Jiang's

- Statement Not as Forceful as U.S. Hoped," *Washington Post*, 26 October 2002.
- 80. Don Kirk, "Korea Leader Backs Plan to Block Oil to the North," *New York Times*, 16 November 2002.
- 81. Howard W. French, "North Korea Says It Will Bar Atom Inspectors," *New York Times*, 23 November 2002.
- 82. Korean Central Television (Pyongyang), 4 December 2002.
- 83. Korea Central News Agency [hereafter KCNA], Pyongyang, 12 December 2002.
- 84. KCNA, 29 December 2002.
- 85. Korean Central Broadcasting Station (Pyongyang), 10 January 2003.
- 86. Carla Ann Robbins and David S. Cloud, "Powell Sees Flaws in 1994 Pact with North

- Korea," *Wall Street Journal*, 14 January 2003; Howard W. French, "Aides Declare U.S. 'Willing to Talk' in Korea Dispute," *New York Times*, 14 January 2003; David E. Sanger, "Bush Says Shift by North Korea Could Bring Aid," *New York Times*, 15 January 2003.
- 87. This evocative phrase was used by Kang Sok Ju during his January 2003 discussions with visiting Russian vice foreign minister Alexander Losyukov, as reported in *Chungang Ilbo* (Seoul), 21 January 2003.
- 88. David E. Sanger, "U.S. Sees Quick Start of North Korea Nuclear Site," *New York Times*, 1 March 2003.
- 89. Testimony of James A. Kelly, "Regional Implications of the Changing Nuclear Equation on the Korean Peninsula," (fn 6), p. 26.

